#13 Amdt C (WE) 4-25-03 AJ

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Katsuhide MANABE et al.

Serial No.: 10/052,347 Group Art Unit: 2812

Filed: January 23, 2002 Examiner: Mulpuri, S.

For: A METHOD FOR MANUFACTURING A GALLIUM NITRIDE GROUP COMPOUND SEMICONDUCTOR

Honorable Commissioner of Patents
Washington, DC 20231

AMENDMENT UNDER 37 C.F.R. § 1.111

Sir:

In response to the Office Action dated December 3, 2002, please amend the above-identified application as follows:

IN THE CLAIMS:

Please amend the claims to read as follows:

C1

19. (Twice Amended) A method for producing a gallium nitride group compound semiconductor by using an organometallic compound vapor phase epitaxy, comprising:

setting a mixing ratio of a silicon-containing gas to at least one other raw material gas during said vapor phase epitaxy at a desired value in a range over which a conductivity of the gallium nitride group compound semiconductor increases substantially proportionally with said mixing ratio so as to obtain a desired conductivity (1/resistivity) of said gallium nitride group compound semiconductor; and

forming said gallium nitride group compound semiconductor by feeding said silicon-containing gas and said at least one other raw material gas at said mixing ratio.

20. (Twice Amended) A method for producing a gallium nitride group compound semiconductor by using an organometallic compound vapor phase epitaxy, comprising:

setting a mixing ratio of a silicon-containing gas to at least one other raw material gas during said vapor phase epitaxy at a desired value in a range over which a carrier